

# ENTOMOLOGICAL NEWS

VOL. XXXVII

JULY, 1926

No. 7

## The Rediscovery of "*Hesperia bulenta*" Bdl.-Lec., with Notes on other Species (Lepid. HesperIIDae).

By FRANK, MORTON JONES, Wilmington, Delaware.

(Plate IX.)

One of the puzzles handed down from the earlier days of North American lepidopterology has been the identity of "*Hesperia bulenta*" (Bdl.-Lec., Lep. Am. Sept., plate 67, 1833, with figures of the male, female, under surface of the female, the larva and the pupa, all reproduced without text description from drawings by Abbot). Do these figures represent a species improperly accredited to our fauna? Are they poor drawings of a species more familiar to us under another and later name? Or does such an insect exist, presumedly in coastal Georgia, but not rediscovered since Abbot's time?

In the subsequent literature, the name has been variously treated: from Smith's two lists (1891-1903) it is omitted; similarly from Skinner's Catalogue (1898) and Supplement (1904), and from Dyar's List (1902); Edwards (1872) lists it as a valid species, accrediting it to "Gulf States"; in his Catalogue of 1877 he refers his own species, *palatka*, to the synonymy under *bulenta*; and in his revised Catalogue of 1884 he restores *palatka* and lists *bulenta* among species omitted for want of authentication; Strecker (1878) lists "*pilatka*" Edw. as a synonym of *bulenta* Bdl.-Lec.; Scudder (1871) lists *bulenta* among species he has been unable to examine or determine, and in 1889 he refers *bulenta* Streck. to *palatka* Edw., but states that *bulenta* Bdl.-Lec. is not the same insect; Barnes & McDunnough (1917) place *bulenta* Bdl.-Lec., with a query, under *byssus* Edw. (if identical, *bulenta* would have priority); and Lindsey (1921) says he follows McDunnough in placing *bulenta* "tentatively as a synonym of *byssus*"; Skinner & Williams (1924) dissent from previous identifications and from the relegation of the name to the synonymy, and list *bulenta*

as a species not available for study but included in their genus *Problema*, with *byssus* Edw. the genotype. We have then, Edwards, Scudder, Skinner & Williams, in their final references, agreeing that *bulenta* Bdl.-Lec. must be distinct from our recognized allied species.

In July, 1925, the writer made a collecting trip through coastal Virginia and North Carolina, with Wilmington, North Carolina, as his southern limit; at this point, crossing the ferry, which at frequent intervals connects the city with the two-mile causeway through the swamps (old rice lands) to the west, he found here a most favorable collecting place, especially for the *Hesperidae*; the embanked roadway offered firm footing, the broad ditches on either side were choked with a luxuriant and varied flora; here and there, abundant blooms of *Pontederia* attracted the larger skippers, among which *viator* Edw. and an unrecognized species of similar size were frequently noted; at this date (July 28), both species had been flying for some time and were no longer in prime condition; five specimens (two males, three females) of the second species were captured in the course of the morning, and many others were seen, out of reach.

At Dr. Skinner's suggestion, these insects, which do not belong to any of our recognized species, were compared with the Boisduval-Leconte plate of *bulenta*, by which comparison it becomes apparent that they most probably represent the true *bulenta*—certainly are much nearer it than are either *byssus* or *palatka*. By Lindsey's keys they fall to the genus *Atrytone* Scud.; in their genitalic structure (Text fig. 6) they are close to, but abundantly distinct from, *byssus* Edw., thus confirming the rather remarkable prevision of Skinner & Williams in assigning this species, with *byssus*, to their genus *Problema*; the following description and the accompanying illustrations (Plate IX) should simplify future recognition of the species.

***Problema bulenta* Bdl.-Lec.**

♂.—Head and collar above and patagia, golden brown; the thorax posteriorly and the abdomen more greenish; beneath paler and duller, the palpi, collar, and abdomen almost white;

third joint of palpi black; antennae dark above, pale beneath, annulate, the apiculus ferruginous.

Wings above clear yellow, marked and bordered with blackish brown; the dark basal markings of *byssus* are here represented by a narrow shade following the cubitus to the origin of  $Cu_2$ , by the darkening of the sub-costal and radial veins, and by a few scattered dark scales; the end of the cell is conspicuously marked on the yellow ground by a narrow lunate bar of even width, which merges at its upper end with a dash extending basally along the radius and diffusely to the costa, whence distally it joins the dark border of the outer margin; the anal vein, and thence to the inner margin, is dark, and this area is overlaid basally with yellow hairs; the dark outer margin widens at the apex, and from opposite the cell regularly to the anal angle, with short dentations between the veins and with a faint diffuse shade of scattered scales connecting it with the discal lunule; fringes concolorous with the dark border.

The secondaries have the costa broadly darkened; the dark border of the outer margin is narrowest opposite the cell, thence widening to the anal angle and continuing along the inner margin, which basally is overlaid with yellow hairs; the cell is included in the yellow ground, a few dark scales at its distal end indicating a discal bar; the cubitus and its branches, especially  $Cu_2$ , are narrowly darkened on the yellow ground; fringes dull yellow.

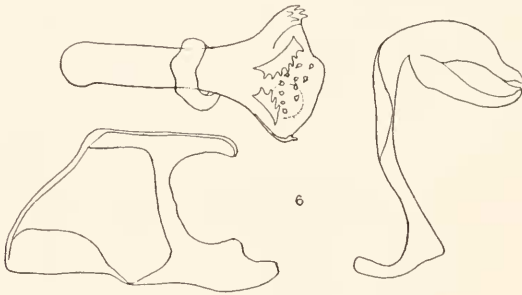
Beneath, both primaries and secondaries are yellow, the secondaries without marks; the primaries are deeper in color basally, paler and duller apically; the end of the cell is marked with a bar, less conspicuously than above; the base of the wing is densely black, this marking not reaching the costa, but filling the base of the cell, following the cubitus to the origin of  $Cu_1$ , the inner margin broadly to the anal vein, and the outer margin more diffusely to  $Cu_1$ , with scattered dark scales on the pale ground between  $Cu_2$  and the anal vein; fringes of both wings pale dull yellow. Expanse 33 mm.

♀.—Similar to the ♂ in ground color, but with the dark areas expanded and the veins darkened; the discal bar of primaries becomes part of a broad shade which extends distally to partial fusion with the outer border; the basal shade widens to include the base of the cell, and the whole costal area is darkened and basally overlaid with ferruginous.

The secondaries have a broad bar closing the cell and in contact with the costal border; and the darkening of the cubitus and its branches splits up the yellow area. Beneath, the secondaries are bright clear yellow, without marks; the primaries

show more tendency toward ferruginous, and the black basal area fills the cell; the diffusely blackened area of the outer margin below  $Cu_1$  is broader than in the  $\delta$ , and between this and the densely black basal area the ground pales to almost white. Expanse 40 mm.

The  $\delta$  insect here described as *bulenta* agrees with the Bdl.-Lec. plate in the absence of a sex-mark (*palatka*  $\delta$  has a black sex-mark, a character too conspicuous to have been overlooked even by a careless draughtsman), in its narrow lunate discal marking, and in its almost clear yellow basal area (*byssus*  $\delta$  has a broad diffuse bar at the end of the cell, and is widely darkened basally); in both sexes, insect and plate are in such detailed agreement that little doubt of their identity remains; the most obvious difference, the conspicuous division, on the plate, of the yellow marking of the secondaries of the  $\delta$ , may readily be due to exaggeration by the copyist of the normally darkened  $Cu_2$ .



Genitalia of *Problema bulenta*  $\delta$ .

The  $\delta$  from which the drawing of the genitalia was made (with the micro slide), and the  $\delta$  illustrated on Plate IX, have been deposited in the Academy of Natural Sciences, Philadelphia; the other  $\delta$  whose capture is recorded, at the American Museum of Natural History, New York; a  $\delta$ , in the Barnes Collection at Decatur; the remaining  $\delta$  in the collection of the author.

On the trip referred to above, in company with Mr. Henry Bird, the writer visited the Great Dismal Swamp area of eastern Virginia. Making Suffolk, Va., our headquarters (July 22 to

26), we found ready access to the swamp, on foot, along the embankment of the Jericho Ditch and also along the ramifications of a logging railroad which enters the swamp from its western margin a few miles further south. Open areas abounded in blooming *Clethra*, which with other flowers attracted the *Hesperiidæ* in some abundance; among our interesting captures were bright fresh specimens of *Amblyscirtes tector* Hbn., several newly emerged males (no females) of *Poanes yehl* Skinner (extending the known range of the species, its identity confirmed by a study of the genitalia), and specimens which we at the time referred to *Amblyscirtes (Epiiphyes) Dyar carolina* Skinner. In comparing this latter series with the type material of *carolina* it became apparent that while they seem in full agreement structurally and in the markings of the upper surface, the under surface of secondaries shows such decided divergence that their identity is seriously questionable. The type description of *carolina* reads, "Underside: \*\*\*\*\* Inferiors brownish yellow, distinctly spotted with dark brown dots"; the Great Dismal Swamp insects reverse this character, having the ground color of secondaries, beneath, dark with the spots pale; nor do the spots of the two forms seem to be identical in position. Further investigation shows that these differences are neither sexual nor seasonal, and that the doubtful form is by no means confined to the Great Dismal Swamp region. Mr. R. C. Williams, Jr. finds no significant genitalic differences, but considers this condition inconclusive of specific identity. With this uncertainty of status, the new form is described as

***Amblyscirtes carolina reversa* n. var.**

♂ and ♀.—Differing from typical *carolina* in coloration of under surface of secondaries, which in *reversa* are russet brown in ground color, more or less overlaid, especially along the veins, with yellow scales, and with a variable number of yellow spots; when the maximum number of spots is present, these show arrangement in two roughly semi-circular rows, the inner (at basal quarter of the wing) consisting of four, the outer (intervenular, beyond the middle) of seven spots.

Variation in the amount of yellow powdering indicates the

possibility that typical *carolina* may result from a preponderance of yellow suffusion, leaving the dark ground in the form of scattered spots.

Holotype ♂, allotype ♀, in Academy of Natural Sciences, Philadelphia; paratype ♂ and ♀, American Museum of Natural History, New York; paratype ♂ in collection of E. L. Bell; all of these from type locality, Suffolk, Virginia, July 22-24, 1925. Paratype ♂, Southern Pines, North Carolina, VII.28.1911, in the Barnes collection; four paratypes retained in the collection of the author, 1 ♂, 1 ♀ of type locality and date; 1 ♂, Summer-ville, South Carolina, IV.20.1907; 1 ♀, Southern Pines, North Carolina, VII.28.1911.

#### EXPLANATION OF PLATE IX.

*Problema bulenta* Bdl.-Lec., 1, 1a, male; 2, 2a, female.

*Amblyscirtes carolina* Skinner, 5, 5a, female (paratype).

*Amblyscirtes carolina reversa* Jones, 3, 3a, male; 4, female.

---

### Thomas Lincoln Casey as a Coleopterist.

By MELVILLE H. HATCH,<sup>1</sup> University of Michigan,  
Ann Arbor, Mich.

(Continued from page 179.)

Furthermore, Casey had little regard or interest for the bibliographical aspect of his subject. In one connection (20:3) he purposely refrained from considering previous work, since he "preferred to work out as nearly as possible an original scheme, which by comparison with the others, will furnish additional coordinated data to aid future students in this very difficult subject" (the American Platyninae). He was criticized in Germany for such omission, and replied that he was too much concerned with the study of nature to spend much time in learning what others have written before him (08:163-165). This attitude was the more remarkable in that he had assembled a coleopterological library of unusual completeness.

Several of the more important attacks on his procedure may be mentioned. Walther Horn, in his review of Casey's activity

---

<sup>1</sup> Contribution from the Zoölogical Laboratory of the University of Michigan.